A brave new world?

J. S. Jones

Evolutionary Studies: A Centenary Celebration of the Life of Julian Huxley. Edited by G. A. Harrison and M. Keynes. *Macmillan (in association with The Eugenics Society), London: 1989. Pp.256. £35.*

JULIAN Huxley was one of the last of Britain's establishment biologists, and in this volume members of the biological establishment combine with others to commemorate the centenary of his birth. There are two portraits of him here: in the lap of his grandfather, Thomas Henry Huxley — Darwin's bulldog — and seated with his utopian brother Aldous. Two themes recur throughout his life: a determination to defend natural selection and an unapologetic readiness to apply evolutionary principles to the improvement of the human race.

Sir Andrew Huxley outlines his half-brother's background and career — which was extraordinary enough: a thousand publications, a professor at the age of 26, first head of the United Nations Educational, Social and Cultural Organisation (UNESCO), and among the founders of the Nature Conservancy and the World Wildlife Fund. In 1929 Julian collaborated with H. G. Wells and his son on *The Science of Life*, an enormously successful popular account of biology. The books he published in the next five years included *Birdwatching and Bird Behaviour*, *Ants*, *Africa View*, *Problems of Relative Growth*, *What Dare I Think?*, *A Scientist among the Soviets*, *The Captive Shrew and other Poems of a Biologist*, *The Elements of Experimental Embryology* and *We Europeans, a Survey of 'Racial' Problems*.

This breadth of interest was reflected in his research, and there is no doubt that Julian Huxley was a leading biologist of pre-war days, carrying out some of the first systematic studies of animal behaviour, of the genes controlling development and cell recognition, and of the evolution of shape and size. Huxley helped to formulate the language of biology. Cline, allometry, ritualization, and the modern synthesis itself are all terms coined by him. His belief in the overwhelming importance of selection led to some excesses in later years, and few would now agree that natural selection is always a force for progress and a "power that makes for righteousness" in human behaviour. Loyalty is not a convincing support for any theory, and Darwin is better defended by bulldogs than by lapdogs.

T. H. Huxley with his grandson, Julian, in 1895.

Huxley's biological work is brought up to date here in chapters on molecular evolution, on ethology, palaeontology, human evolution, anthropology and relative growth. There is a personal memoir by E. B. Ford, and an attempt by Patrick Bateson to explore what evolutionary theory might or might not be able to tell us about ethics. With the exception of a balanced preface by G. A. Harrison, one of the editors of the book, there is little mention of the persistent controversy about the importance or otherwise of natural selection in evolutionary fields as different as molecular genetics and animal behaviour. As is perhaps inevitable, the ritual of commemoration involves genuflections almost as stereotyped as those of the great crested grebe: Huxley's work is described as meticulous, acute, careful, brilliant, beautiful, painstaking, illustrious and seminal.

No doubt this is true: but to read his 1962 paper "Eugenics in Evolutionary Perspective" is to realize that he could also be foolish and undiscriminating. It might — just — have been acceptable to write in 1931 that unemployment pay should be granted only to those willing to have no more children and that "infringement of this order could probably be met by a short period of segregation in a labour camp", but the knowledge of just where that particular utopia ended up was enough to instil a certain humility into most of those who thought that society could be arranged on biological principles. Not so Huxley: his biology master at Eton noted a "tendency to think himself infallible", and less than 20 years after the war, he was blithely suggesting that social-problem groups should be obliged to practice compulsory birth control, and that human races must have considerable genetic differences in temperament and mental capacity.

Huxley shared with many of his scientific contemporaries those highly heritable human characteristics of wealth, education and social position. The agenda of eugenics from Plato to Galton and beyond has always been the survival of the richest, and it is in discussing positive eugenics that Huxley was at his most enthusiastic. He was keen on the idea, suggested to him by Sir Cyril Burt, that some types of high intelligence are determined by single genes, and that breeding from these rare individuals might do a great deal to improve the genetic constitution of humankind. Although he refused to make the appropriate deposit in an American sperm bank, he strongly supported the idea of EID (eugenic insemination by donor).

Julian Huxley was perhaps the last biologist to take himself seriously — or at least to expect that he would be taken seriously by those with the political power to implement his ideas. It is one of the surprising facts of eugenics that as the means of reaching a genetical utopia get closer, the interest in achieving it has almost disappeared. The Laboratory for National Eugenics at University College London changed its name to the Galton Laboratory long ago, and the (quite separate) Eugenics Society, publisher of this book, has just altered its own title to the Galton Institute. In Britain, only a few millionaires, physicists, Conservative politicians and members of other fringe groups now express any concern about their eugenic duty to generations yet unborn. The explosion of knowledge about human genetics is now directed almost exclusively to improving the lot of individuals or of families rather than that of humanity. Perhaps this change in emphasis arises from a realization that biology is a lot more complicated than we ever thought, but perhaps it just shows that biologists are a lot poorer than they used to be. □

J. S. Jones is in the Galton Laboratory, University College London, London NW1 2HE, UK.